



0000077188

BEFORE THE ARIZONA CORPORATION COMMISSION

MIKE GLEASON

Chairman

WILLIAM A. MUNDELL

Commissioner

JEFF HATCH-MILLER

Commissioner

KRISTEN K. MAYES

Commissioner

GARY PIERCE

Commissioner

Arizona Corporation Commission

DOCKETED

SEP 27 2007

DOCKETED BY

ne

IN THE MATTER OF THE APPLICATION
OF SOUTHWEST GAS CORPORATION –
FILING FOR APPROVAL OF ITS
DISTRIBUTED GENERATION PROGRAM

DOCKET NO. G-01551A-04-0876

DECISION NO. 69916ORDER

Open Meeting
September 18 and 19, 2007
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Southwest Gas Corporation (“Southwest”) is engaged in providing natural gas within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.

2. On June 26, 2006, Southwest Gas Corporation (“Southwest”) filed an application for approval of its Distributed Generation (“DG”) program, as required by Decision No. 68487. Decision No. 68487 required that the Company file detailed descriptions of its demand-side management programs within 120 days of the Commission’s February 23, 2006 Order approving rate changes effective March 1, 2006.

3. The proposed program would be newly-implemented. The DG program is one of seven DSM programs included in Southwest’s 2006 Arizona Demand Side Management Program Plan.

...

...

4. Under Southwest's proposal, rebates will be provided to residential customers purchasing high-efficiency water heaters, clothes washers and dryers, and programmable thermostats. To be eligible, residential customers must purchase appliances with ENERGY STAR® ratings or, if there are no such ratings, appliances meeting program efficiency guidelines. The high-efficiency appliances purchased under this program would also have to be slated for installation in a Southwest service area.

5. Analysis by Staff indicates that programmable thermostats are not a cost-effective DSM measure. Analysis also indicates that energy savings for the clothes washer/dryer combination have not been established and that a cost-effective level of savings may not exist for this measure, particularly given its higher incremental cost. Staff has recommended that programmable thermostats and the clothes washer/dryer combination be eliminated from the Consumer Products program and that, instead, the program be used to promote more efficient water heaters. Staff has also recommended that Southwest Gas review other potential gas DSM measures to determine if any can be included in the Consumer Products program on a cost-effective basis, submitting the proposed new measure or measures to the Commission for approval.

6. Staff has recommended that this program be approved as a one-year pilot only, and that Southwest file with the Commission for approval to continue the program at the end of one year. Data concerning program participation and the cost-effectiveness of the program should be included with the application.

Marketing and Delivery Strategy

7. As proposed by Southwest, the program would be marketed to Southwest customers through inserts, direct mail, newsletters and announcements on websites. Southwest would also hire a contractor to work with retailers featuring high-efficiency consumer appliances; the contractor would deliver informational materials, coordinate events, and act as liaison with Southwest. The program's contract employee would also conduct workshops at retail locations to educate consumers on the benefits of high-efficiency equipment, installation techniques, and on the use of programmable thermostats.

1 8. Southwest employees would also work on the program, and would answer
2 questions, supply rebate applications, and perform a follow-up survey of participants. Customers
3 would be responsible for filling out the application for a rebate, for attaching the invoice or receipt,
4 and for submitting the application, either to Southwest or its contractor.

5 9. Staff has recommended that marketing for the Consumer Products program be
6 adjusted to reflect any measures eliminated or added to the program.

7 Monitoring and Evaluation

8 10. If the program is approved, Southwest proposes to survey a sampling of program
9 participants in order to evaluate customer satisfaction, program communication, and the role of
10 rebates in decisions to purchase energy-efficient equipment. This survey would take the form of
11 follow-up phone calls.

12 11. Staff has recommended that the survey be designed to avoid inflating the level of
13 free ridership. In a New Mexico survey of its Consumer Products program, the level of free
14 ridership may have been overstated due to participants' reluctance to admit that they would not
15 have purchased energy-efficient products without incentives.

16 Program Budget and Incentives

17 12. Marketing costs come to \$291,000 and represent 36.4 percent of the proposed
18 budget, but the program is designed to reach a large number of residential customers spread over
19 substantial geographic area. The marketing program is also intended to reach and motivate a target
20 population that is often buying appliances on an emergency basis, when an existing appliance has
21 broken down and must be replaced quickly.

22 13. This budget also includes \$50,000 to cover the cost of the contract employee who
23 would work with retailers to market the program's measures. Southwest states that the need to
24 reach and work with retailers across a large service area will require a full-time contract employee.
25 The table below sets out the budget proposed by Southwest:

26 ...

27 ...

28 ...

Southwest Proposed Annual Budget

Implementation	
Outside Contractor	\$50,000
Marketing	
Bill inserts, direct mail, signage, banners, brochures	\$291,000
Incentives	
Estimated amount	\$456,750
Other Costs	
Materials/Supplies	\$2,250
TOTAL	\$800,000

14. Below are the incentives proposed by Southwest, along with the estimated participation for each measure. The proposed total for each measure is also included.

Incentives Proposed by Southwest

Measure	Proposed Incentive	Estimated Participation	Estimated Total for Each Measure
Water Heater	\$75	1,500	\$112,500
Clothes Washer/Dryer (sets)	\$200	1,500	\$300,000
Programmable thermostats	\$15	2,950	\$44,250
TOTAL	N/A	5,950	\$456,750

15. Staff has recommended that incentive dollars be shifted from the measures which Staff has proposed eliminating to water heaters. Due to the high cost of marketing to a large residential customer base, the program costs are likely to remain similar to what Southwest has proposed, even with the elimination of two measures. At the same time, reducing the budget without a decrease in the marketing costs may make it difficult to reach a sufficient number of potential program participants. In order to maintain cost-effectiveness with one measure, the Southwest program should offer incentives on a larger number of water heaters with the dollars shifted from the eliminated measures. The information provided by Southwest indicates that the market for more efficient hot water heaters in its service areas is potentially large enough to support the program in a cost-effective manner.

16. Staff recommends that the budget for the contractor position for the Consumer Products program be reduced to \$25,000. Although the geographic area is large, the contractor

1 would assist in marketing only one measure, and would be working only with locations where
2 water heaters are sold. If new DSM measures are added to the program, or if the water heater
3 measure alone demonstrates both cost-effectiveness and high levels of participation, this issue can
4 be revisited when Southwest files for approval to continue the program.

5 17. Staff has recommended a budget of \$775,000, reflecting the reduction for the
6 contractor position.

7 Staff Analysis

8 18. Programmable thermostats do not result in reliable energy savings. Unlike
9 appliances that produce savings through more efficient use of energy, programmable thermostats
10 can only lead to energy savings if there are changes in consumer behavior. Field studies have
11 shown that these changes in behavior do not usually occur in practice and that, in some instances,
12 energy consumption increases after programmable thermostats have been installed. The
13 Environmental Protection Agency ("EPA") is in the process of ending Energy Star designation for
14 programmable thermostats and will, instead, focus on educating consumers on the use of
15 programmable thermostats.

16 19. Staff has recommended that rebates for programmable thermostats be eliminated
17 from the Consumer Products program.

18 20. Staff has also recommended that the washer/dryer combination be eliminated from
19 the program. The per-measure incentive offered under the program is comparatively high (\$200),
20 while the energy savings have not been clearly established. With higher-efficiency appliances,
21 therm savings may result from decreased hot water usage and increased moisture removal during
22 the wash cycle, and moisture sensors may shorten drying cycles, if properly maintained. However,
23 the uncertainty of those savings and the absence of data to indicate the level of savings do not
24 support the use of incentives to promote this measure.

25 21. The more energy-efficient water heaters currently available on the market provide
26 sufficient therm savings to make the proposed program cost-effective, if program participation is
27 increased. In the future, new types of water heaters may provide higher therm savings once these
28 technologies are available on the market, and once their reliability and cost-effectiveness have

1 been established. These technologies include Gas Condensing and Advanced Non-Condensing gas
2 water heaters.

3 22. Staff estimates that the program would have a cost-effectiveness ratio of slightly
4 over 1.0 for individual measures. Staff calculations indicate that, with a half-time contractor
5 costing \$25,000 per year, participation would need to increase to 4,100 to maintain cost-
6 effectiveness.

7 23. The estimated environmental benefits arising from this program would be more
8 modest than originally estimated by Southwest, since these original estimates include a level of
9 savings from programmable thermostats that is unlikely to be realized in practice, along with
10 savings from the washer/dryer combination. As a result of excluding estimated savings from these
11 two measures, the estimated environmental savings have been revised downward, and now include
12 only those savings related to the water heaters. Staff estimates that with 4,100 installations per
13 year, there would be 2,103,300 lbs. in lifetime CO₂ savings. The estimated annual savings would
14 be 701,100 lbs.

15 Reporting Requirements

16 24. Staff has recommended that Southwest include information about the Consumer
17 Products program in Southwest's semi-annual DSM reports. The information provided should
18 include the following: (i) the number of participants; (ii) the number and nature of measures
19 installed; (iii) the result of the follow-up survey and any resulting changes in the survey; (iv)
20 sample copies of inserts and other forms of advertisement for the program; and (v) program
21 spending.

22 25. Staff has further recommended that the follow-up survey proposed by Southwest as
23 part of its monitoring process should be conducted on an annual basis, with the results reported in
24 Southwest's semi-annual DSM report.

25 Summary of Staff Recommendations

26 26. Staff has recommended that programmable thermostats and the clothes
27 washer/dryer combination be eliminated from the Consumer Products program and that, instead,
28 the program be used to promote more efficient water heaters.

1 27. Staff has recommended that Southwest Gas review other potential gas DSM
2 measures to determine if any can be included in the Consumer Products program on a cost-
3 effective basis, submitting the proposed new measure or measures to the Commission for approval.

4 28. Staff has recommended that this program be approved as a one-year pilot only, and
5 that Southwest file with the Commission for approval to continue the program at the end of one
6 year. Data concerning program participation and the cost-effectiveness of the program should be
7 included with the application.

8 29. Staff has recommended that the budget for contractor position for the Consumer
9 Products program be reduced to \$25,000, if the programmable thermostat and washer/dryer
10 measures are eliminated.

11 30. Staff has recommended that marketing for the Consumer Products program be
12 adjusted to reflect any measures eliminated or added to the program.

13 31. Staff has recommended that the follow-up survey be designed to avoid inflating the
14 level of free ridership.

15 32. Staff has recommended that incentive dollars be shifted from the measures which
16 Staff has proposed eliminating to the water heater measure.

17 33. Staff has recommended a budget of \$775,000, reflecting the reduction for the
18 contractor position.

19 34. Staff has recommended that information about the Consumer Products program be
20 included in Southwest's semi-annual DSM reports. The information provided should include the
21 following: (i) the number of participants; (ii) the number and nature of measures installed; (iii) the
22 results of the follow-up survey and any resulting changes in the program; (iv) sample copies of
23 inserts and other forms of advertisement for the program; and (v) program spending.

24 35. Staff has recommended that the follow-up survey proposed by Southwest as part of
25 its monitoring process should be conducted on an annual basis, with the results reported in
26 Southwest's semi-annual DSM report.

27 ...

28 ..

CONCLUSIONS OF LAW

1. Southwest is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Southwest and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated August 8, 2007, concludes that it is in the public interest to approve the Consumer Products program with the modifications and recommendations proposed by Staff.

ORDER

IT IS THEREFORE ORDERED that the Consumer Products program be and hereby is approved.

IT IS FURTHER ORDERED that programmable thermostats and the clothes washer/dryer combination be eliminated from the Consumer Products program and that, instead, the program be used to promote more efficient water heaters.

IT IS FURTHER ORDERED that Southwest Gas review other potential gas DSM measures to determine if any can be included in the Consumer Products program on a cost-effective basis, submitting the proposed new measure or measures to the Commission for approval.

IT IS FURTHER ORDERED that this program be approved as a one-year pilot only, and that Southwest file with the Commission for approval to continue the program at the end of one year. Data concerning program participation and the cost-effectiveness of the program should be included with the application.

IT IS FURTHER ORDERED that the contractor position for the Consumer Products program be reduced to a part-time position, with a budget of no more than \$25,000.

IT IS FURTHER ORDERED that marketing for the Consumer Products program be adjusted to reflect any measures eliminated or added to the program.

IT IS FURTHER ORDERED that the follow-up survey be designed to avoid inflating the level of free ridership.

...

1 IT IS FURTHER ORDERED that incentive dollars be shifted from the measures which
2 Staff has proposed eliminating to the water heater measure.

3 IT IS FURTHER ORDERED that the budget for the Consumer Products program be
4 \$775,000 annually, reflecting reduction of the contractor position to part-time.

5 IT IS FURTHER ORDERED that information about the Consumer Products program be
6 included in Southwest's semi-annual DSM reports. The information provided should include the
7 following: (i) the number of participants; (ii) the number and nature of measures installed; (iii) the
8 results of the follow-up survey and any resulting changes in the program; (iv) sample copies of
9 inserts and other forms of advertisement for the program; and (v) program spending.

10 ...

11 ...

12 ...

13 ...

14 ...

15 ...

16 ...

17 ...

18 ...

19 ...

20 ...

21 ...

22 ...

23 ...

24 ...

25 ...

26 ...

27 ...

28 ...

1 IT IS FURTHER ORDERED that the follow-up survey proposed by Southwest as part of
2 its monitoring process be conducted on an annual basis, with the results reported in Southwest's
3 semi-annual DSM report.

4 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

5
6 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

7
8
9 CHAIRMAN

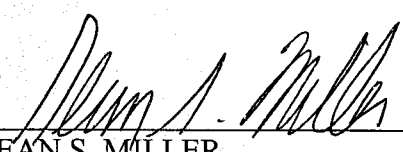

COMMISSIONER

10
11 
COMMISSIONER


COMMISSIONER


COMMISSIONER

13 IN WITNESS WHEREOF, I DEAN S. MILLER, Interim
14 Executive Director of the Arizona Corporation Commission,
15 have hereunto, set my hand and caused the official seal of
16 this Commission to be affixed at the Capitol, in the City of
17 Phoenix, this 27th day of September, 2007.

18
19 
DEAN S. MILLER
Interim Executive Director

20
21 DISSENT: 

22
23 DISSENT: 

24 EGJ:JMK:llm\JFW
25
26
27
28

SERVICE LIST FOR: Southwest Gas Corporation
DOCKET NO. G-01551A-04-0876

Ms. Debra S. Jacobsen
Director, Government & State Regulatory Affairs
Southwest Gas Corporation
5241 Spring Mountain Road
Las Vegas, Nevada 89150-0002

Mr. Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Mr. Christopher C. Kempley
Chief Counsel, Legal Division
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007